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Utilization of farmers towards Mahadbt portal in Ahilyanagar district

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Abstract

The present study entitled Utilization of Farmers Towards MahaDBT Portal in Ahilyanagar District was conducted during the year 2024–25 with 120 farmers selected through random sampling. The study aimed to assess the level of utilization pattern of farmers towards the MahaDBT portal which serves as a unified online platform for Direct Benefit Transfer (DBT) schemes in Maharashtra. Data were collected using a structured interview schedule and analyzed using the range method. The results revealed that the majority of farmers (64.17%) possessed a medium level of utilization, 54.17 per cent of respondents showed medium utilization, while, 28.33 per cent showed high and 17.50 per cent low utilization.

Keywords: MahaDBT portal, farmers utilization, digital agriculture

Introduction

Agriculture is the foundation of India's economy and greatly improves the lives of farmers personally, socially and economically. More than 58 per cent of rural families in India rely on agriculture. ICT and IoT tools provide real-time information directly to farmers. ICT includes various technologies like networks, electronic devices and mobile apps that help share knowledge efficiently. ICT has been especially helpful for small and marginal farmers, improving their marketing and increasing their income. It also gives farmers a platform to share their ideas, experiences and innovations. Additionally, it encourages farmers to use scientific methods for better farming. Among ICT tools, mobile phones are becoming very popular, transforming how agricultural information is shared. Mobile phones have also led to the development of useful farming apps and online portals benefiting farmers and others in the sector (Manobharathi and Anandaraja, 2021) [2].

Direct Benefit Transfer was introduced in India in 2013 as a major reform to improve the delivery of government welfare schemes. Its goal was to make the transfer of funds and information quicker, more accurate and transparent while reducing fraud and duplication. The DBT Mission, under the Cabinet Secretariat, oversees the implementation of DBT programs across all government ministries. An Electronic Payment Framework was established for all central government schemes where cash benefits are transferred directly to beneficiaries. Since Aadhaar provides a unique identity, it is preferred for identifying and verifying beneficiaries. DBT is a top priority for the government and the DBT Bharat Portal (<https://dbtbharat.gov.in/>) was launched in 2016 to manage all DBT-related schemes. This portal contains details about schemes, beneficiaries, fund transfers and official documents. The Government of Maharashtra launched the MahaDBT (Maharashtra Direct Benefit Transfer) portal to provide farmers and citizens with direct access to various government schemes ensuring transparency, timeliness and reduction in intermediary layers. It serves as a single-window platform where farmers can apply for subsidies and financial benefits. However despite its potential the utilization level of the MahaDBT portal among farmers remains limited due to various technical, infrastructural and awareness-related constraints. Assessing farmers knowledge and utilization level helps understand the effectiveness of such digital interventions in rural development.

Methodology

The study was conducted in Ahilyanagar district of Maharashtra covering Shrirampur and Rahuri taluka. Total eight villages were selected i.e. Rahuri, Deshwandi, Pimpri Avghad, Aradgaon, Belapur, Waladgaon, Ainatpur, Karegaon and from each village 15 respondents were selected randomly to involve total 120 respondents for the study purpose. Primary data were collected through a pre-tested structured interview schedule during the agricultural

year 2024–25. The data were analyzed using the range method to categorize farmers into low, medium, and high levels utilization based on their scores. Simple percentage analysis was also used for interpretation.

Results and Discussion

The data regarding utilization of MahaDBT portal is presented in Table 1.

Table 1: Distribution of the respondents according to their utilization of MahaDBT portal

Sr. No.	Purpose	VF	F	LF	VL	NA
1.	For buying seeds, fertilizers etc.	48 (40.00)	36 (30.00)	24 (20.00)	6 (05.00)	6 (05.00)
2.	For buying the various pesticides, insecticides etc.	44 (36.67)	34 (28.33)	26 (21.66)	10 (8.34)	6 (05.00)
3.	For buying irrigation sources like sprinkler, pipes, motor etc.	22 (18.03)	41 (34.17)	34 (28.33)	14 (11.66)	9 (07.50)
4.	For buying mechanization items like tractor, power tiller, rotavator, seed drill etc.	20 (16.66)	18 (15.00)	12 (10.00)	30 (25.00)	40 (33.34)
5.	For the charges of fuel used in the generators/tractors	24 (20.00)	30 (25.00)	12 (10.00)	12 (10.00)	42 (35.00)
6.	For the maintenance of the machinery	14 (11.67)	36 (30.00)	36 (30.00)	22 (18.33)	12 (10.00)
7.	For applying any protection treatment for raising crops in the field	24 (20.00)	42 (35.00)	30 (25.00)	14 (11.66)	10 (08.34)
8.	For contacting any paid expertise related to the respective crop in their field	10 (08.34)	24 (20.00)	38 (31.66)	30 (25.00)	18 (15.00)
9.	For maintaining the farming land	19 (15.83)	36 (30.00)	34 (28.33)	18 (18.33)	13 (10.84)
10.	For adopting cropping pattern	17 (14.17)	34 (28.33)	36 (30.00)	22 (18.33)	11 (09.17)
11.	For doing integrated farming	12 (10.00)	31 (25.84)	41 (34.16)	24 (20.00)	12 (10.00)
12.	For artificial insemination of livestock	11 (09.17)	22 (18.33)	36 (30.00)	30 (25.00)	21 (17.50)
13.	For doing daily household purposes	8 (06.67)	18 (15.00)	34 (28.33)	36 (30.00)	24 (20.00)
14.	For medicinal purpose of their livestock	10 (08.33)	20 (16.67)	36 (30.00)	34 (28.33)	20 (16.67)
15.	For paying the school fees of their children	7 (05.83)	14 (11.67)	30 (25.00)	38 (31.66)	31 (25.84)

VF = Very Frequently, F = Frequently, LF = Less Frequently, VL = Very Less, NA = Not at all

The data in Table 1 revealed that a considerable proportion of respondents utilized the MahaDBT portal for various agricultural purchases and operational expenses. 40.00 per cent of the respondents utilized the MahaDBT portal very frequently utilizing it for buying seed, fertilizers etc. followed by 30.00 per cent of the respondents used it frequently, 20.00 per cent respondents less frequently, 5.00 per cent each of the respondents very less and not at all.

It was observed from the Table 1 that 36.67 per cent respondents utilized the MahaDBT portal very frequently for buying pesticides and insecticides, followed by 28.33 per cent used it frequently, 21.66 per cent less frequently, 8.34 per cent very less and 5.00 per cent not at all. In the case of irrigation-related purchases such as sprinklers, pipes and motors, 18.03 per cent respondents utilized it very frequently, 34.17 per cent frequently, 28.33 per cent less frequently, 11.66 per cent very less and 7.50 per cent not at all. for buying mechanization equipments like tractors, power tillers, rotavators and seed drills 16.66 per cent respondents utilized MahaDBT portal very frequently, 15.00 per cent frequently, 10.00 per cent less frequently, 25.00 per

cent very less and 33.34 per cent not at all. Similarly, for paying fuel charges for generators and tractors, 20.00 per cent of the respondents utilized the portal very frequently, followed by 25.00 per cent frequently, 10.00 per cent less frequently, 10.00 per cent very less and 35.00 per cent not at all. Analysis of Table 1 further revealed that 11.67 per cent of respondents utilized the portal very frequently for machinery maintenance, while, 30.00 per cent each reported using it frequently and less frequently, 18.33 per cent very less and 10.00 per cent not at all. For applying protection treatments to crops, 20.00 per cent of the respondents utilized the portal very frequently, followed by 35.00 per cent frequently, 25.00 per cent less frequently, 11.66 per cent very less and 8.34 per cent not at all. A smaller share i.e. 8.34 per cent respondents utilized the portal very frequently for contacting paid expertise related to crops, while, 20.00 per cent did so frequently, 31.66 per cent less frequently, 25.00 per cent very less and 15.00 per cent not at all. Further, the data indicated that 15.83 per cent of respondents utilized the MahaDBT portal very frequently for maintaining farming land, followed by 30.00 per cent

frequently, 28.33 per cent less frequently, 18.33 per cent very less, and 10.84 per cent not at all. For adopting different cropping pattern 14.17 per cent respondents utilized it very frequently, 28.33 per cent frequently, 30.00 per cent less frequently, 18.33 per cent very less and 9.17 per cent not at all. Integrated farming activities were carried out very frequently by 10.00 per cent of respondents through the portal, while, 25.84 per cent did so frequently, 34.16 per cent less frequently, 20.00 per cent very less and 10.00 per cent not at all. For artificial insemination of livestock, only 9.17 per cent reported very frequent use of the portal, 18.33 per cent frequent use, 30.00 per cent less frequent use, 25.00 per cent very less and 17.50 per cent not at all.

It was observed that only 6.67 per cent respondents utilized the portal very frequently for daily household purposes, followed by 15.00 per cent frequently, 28.33 per cent less frequently, 30.00 per cent very less and 20.00 per cent not at

all. The same proportion 6.67 per cent respondents utilized it very frequently for medicinal purpose of livestock, with 15.00 per cent frequently, 30.00 per cent less frequently, 28.33 per cent very less and 16.67 per cent not at all. Another 8.33 per cent reported very frequent use of the portal for livestock medicinal purpose, followed by 16.67 per cent frequently, 30.00 per cent less frequently, 28.33 per cent very less and 16.67 per cent not at all. For paying school fees of children, only 5.83 per cent respondents utilized it very frequent use, while, 11.67 per cent did so frequently, 28.33 per cent less frequently, 30.00 per cent very less and 20.00 per cent not at all.

These results show partial alignment with Gupta (2023)

Extent of utilization of MahaDBT portal

The data on extent of utilization of the MahaDBT portal by the respondents is presented in Table 2.

Table 2: Distribution of farmers according to extent of utilization of MahaDBT portal

Sr. No.	Category	Respondents (N=120)	
		Frequency	Percentage
1.	Low (Upto 35)	21	17.50
2.	Medium (36 to 55)	65	54.17
3.	High (56 and above)	34	28.33
	Total	120	100.00

The findings presented in Table 2 reported that clear distribution of utilization pattern of respondents regarding the MahaDBT portal. The data revealed that 54.17 per cent of participants exhibited a medium level of utilization pattern, while, 28.33 per cent showed high utilization pattern. About 17.50 per cent respondents had low usage pattern. This distribution indicated that a substantial number of respondents were actively engaged with the portals features. These results show partial alignment with Shelke (2020) and Arbat (2021).

Conclusion

The study concluded that a majority of the farmers in Ahilyanagar district had medium level of utilization of the MahaDBT portal. The findings emphasize the need for capacity building and awareness programs through agricultural extension services, Krishi Vigyan Kendras (KVKs) and local government institutions. Providing offline assistance centers and mobile-based tutorials can enhance digital inclusion ensuring a simplified registration process and improved internet access will further strengthen farmers participation in digital governance systems like MahaDBT.

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